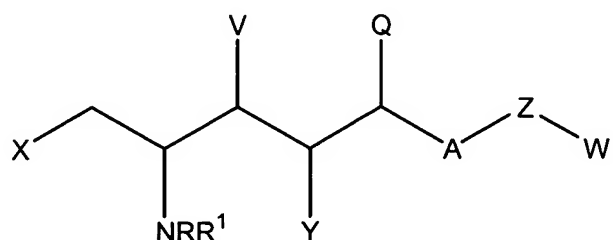


Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) A method for the treatment of an abnormal cell proliferative disorder comprising administering an effective treatment amount of a sphingolipid derivative of the formula:



wherein

A is a spacer group which is $(CH_2)_m$ where $m=0-14$, where any of the hydrogens may be independently replaced by R^1 or X and where any two adjacent carbons may be independently replaced by a C_3-C_8 cycloalkyl group, a 1,2-, 1,3-, or 1,4-disubstituted benzene group, or a 2,3-, 2,4- or 2,5-disubstituted thiophene, furan or pyrrole group;

Y, V, and Q are independently hydrogen, or OR^1 , ~~NR_2 , CN, or~~ alkyl, acyl, or carboxylate, and wherein alternatively, V and Y or Y and Q can together constitute a double or triple bond;

X is hydrogen

W = no substituent, H, alkyl, aryl, alkenyl, alkynyl, alkaryl, aralkyl, $C(O)(CH_2)_nCO_2H$, $C(O)(CH_2)_nCW'_2CO_2H$, or OR^1 ;

W' is selected independently from H, alkyl, aryl, $(CH_2)_nCO_2H$; $(CH_2)_nCH(CO_2H)CH_2CO_2H$; and $(CH_2)_nCH(CO_2H)CH(CH_2CO_2H)CO_2H$;

Z is H, O, NH, NR, $NHC(O)$, CO_2 , $C(O)NH$, or $C(O)NR$;

R is selected independently from H, alkyl, acyl, alkenyl, alkynyl, aryl, alkaryl, aralkyl, or heteroaryl;

R^1 is R or R^2 ;

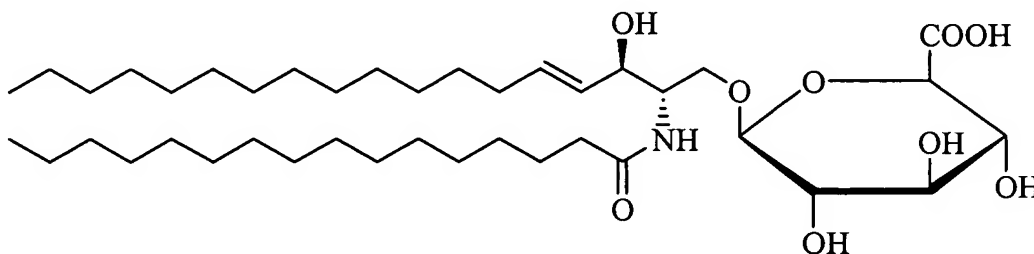
R^2 is β -D-galactoside, N-acetyl- β -D-glucosamine, α -D-mannoside, β -D-cellobiosides, β -D-glucopyranosides, β -D-galactopyranosides, β -D-glucuronides, starch, lactose, raffinose, stachyose, fructo-oligosaccharide or amide or ester of β -cyclodextrin, or dextran linked via succinate and glutarate, or furanose or pyranose carbohydrates;

wherein there is at least one R^2 substituent in the sphingolipid derivative, optionally in a pharmaceutically acceptable carrier to a host in need thereof.

2. (Canceled).

3. (Previously Presented) The method of claim 1, wherein R^2 is selected from the group consisting of β -glucuronide; β -D-galactoside; N-acetyl- β -D-glucosamine; α -D-mannoside; β -D-cellobioside; and β -D-glucopyranoside.

4. (Previously Presented) A method for the treatment of an abnormal cell proliferative disorder comprising administering an effective treatment amount of a Ceramide β -glucuronide, which has the chemical formula



optionally in a pharmaceutically acceptable carrier to a host in need thereof.

5. (Previously Presented) The method of claim 1, wherein the bond between V and Y or Y and Q is double bond.

6-9. (Canceled)

10. (Previously Presented) The method of any one of claims 1 or 3-5 wherein the proliferative disorder is a benign or malignant tumor.

11. (Canceled)

12. (Previously Presented) The method of any one of claims 1 or 3-5, wherein the proliferative disorder is selected from the group consisting of colon cancer, intestinal polyps, intestinal tumors, inflammatory bowel diseases, ulcerative colitis and Crohn's disease, necrotizing enterocolitis, ileocectitis, other inflammations of the lower bowel, antibiotic associated colitis, and tumors of the urogenital tract.

13. (Previously Presented) The method of any of claims 1 or 3-5, wherein the disorder is colon cancer.

14. (Previously Presented) The method of any of claims 1 or 3-5, wherein the disorder is a benign tumor selected from the group consisting of papilloma, adenoma, firoma, chondroma, osteoma, lipoma, hemangioma, lymphangioma, leiomyoma, rhabdomyoma, meningioma, neuroma, ganglioneuroma, nevus, pheochromocytoma, neurilemona, fibroadenoma, teratoma, hydatidiform mole, granuosa-theca, Brenner tumor, arrhenoblastoma, hilar cell tumor, sex cord mesenchyme, interstitial cell tumor, and thyoma.

15. (Previously Presented) The method of claim 10, wherein the tumor is selected from the group consisting of a malignant tumor (cancer), prostatic adenocarcinoma, bladder carcinoma, adenocarcinoma, fibrosarcoma, chondrosarcoma, osteosarcoma, liposarcoma, hemangiosarcoma, lymphangiosarcoma, leiomyosarcoma, rhabdomyosarcoma, myelocytic leukemia, erythroleukemia, multiple myeloma, glioma, meningeal sarcoma, thyoma, cystosarcoma phyllodes, nephroblastoma, teratoma choriocarcinoma, cutaneous T-cell lymphoma (CTCL), cutaneous tumors primary to the skin, breast and other tumors infiltrating the skin, Kaposi's sarcoma, and premalignant and malignant diseases of mucosal tissues.

16. (Previously Presented) The method of any of claims 1 or 3-5, wherein the disorder is selected form the group consisting of preneoplastic lesions, mycosis fungoides, psoriasis, dermatomyositis, rheumatoid arthritis, viruses, molluscum contagiosum, premalignant and malignant diseases of the female genital tract.

17. (Canceled)

18. (Previously Presented) The method of claim 1 wherein the administration triggers the release of cytochrome c in a patient in need thereof.

19. (Previously Presented) The method of claim 1 wherein the administration inhibits protein kinase c in a patient in need thereof.

20. (Previously Presented) The method of claim 1 wherein the administration promotes cell differentiation in a patient in need thereof.

21. (Previously Presented) The method of claim 10 further comprising administering an effective treatment amount of a chemotherapeutic agent.

22. (Original) The method of claim 21, wherein the chemotherapeutic agent is doxorubicin.

23-28. (Canceled)

29. (Previously Presented) The method of claim 1, wherein Y is hydrogen.

30. (Previously Presented) The method of claim 1, wherein V is OR^2 .

31. (Previously Presented) The method of claim 30, wherein V is O- β -D-galactoside.

32. (Previously Presented) The method of claim 30, wherein V is O- β -D-glucuronide.

33. (Previously Presented) The method of claim 30, wherein V is O-(N-acetyl- β -D-glucosamine).

34. (Previously Presented) The method of claim 30, wherein V is O- α -D-mannoside.

35. (Previously Presented) The method of claim 30, wherein V is O- β -D-cellobioside.

36. (Previously Presented) The method of claim 30, wherein V is O- β -D-glucopyranoside.

37. (Previously Presented) The method of claim 30, wherein V is O- β -D-galactopyranoside.

38. (Previously Presented) The method of claim 30, wherein V is O- β -D-galactopyranoside.

39. (Previously Presented) The method of claim 1, wherein Y is H and V is OR^2 .

40. (Previously Presented) The method of claim 39, wherein V is O- β -D-galactoside.

41. (Previously Presented) The method of claim 39, wherein V is O- β -D-glucuronide.
42. (Previously Presented) The method of claim 39, wherein V is O-(N-acetyl- β -D-glucosamine).
43. (Previously Presented) The method of claim 39, wherein V is O- α -D-mannoside.
44. (Previously Presented) The method of claim 39, wherein V is O- β -D-cellobioside.
45. (Previously Presented) The method of claim 39, wherein V is O- β -D-glucopyranoside.
46. (Previously Presented) The method of claim 39, wherein V is O- β -D-galactopyranoside.
47. (Previously Presented) The method of claim 39, wherein V is O- β -D-galactopyranoside.
48. (Previously Presented) The method of claim 1, wherein Q is OR².
49. (Previously Presented) The method of claim 48, wherein Q is O- β -D-galactoside.
50. (Previously Presented) The method of claim 48, wherein Q is O- β -D-glucuronide.
51. (Previously Presented) The method of claim 48, wherein Q is O-(N-acetyl- β -D-glucosamine).
52. (Previously Presented) The method of claim 48, wherein Q is O- α -D-mannoside.
53. (Previously Presented) The method of claim 48, wherein Q is O- β -D-cellobioside.
54. (Previously Presented) The method of claim 48, wherein Q is O- β -D-glucopyranoside.
55. (Previously Presented) The method of claim 48, wherein Q is O- β -D-galactopyranoside.
56. (Previously Presented) The method of claim 48, wherein Q is O- β -D-galactopyranoside.
57. (Previously Presented) The method of claim 1, wherein Y is H and Q is OR².

58. (Previously Presented) The method of claim 57, wherein Q is O- β -D-galactoside.
59. (Previously Presented) The method of claim 57, wherein Q is O- β -D-glucuronide.
60. (Previously Presented) The method of claim 57, wherein Q is O-(N-acetyl- β -D-glucosamine).
61. (Previously Presented) The method of claim 57, wherein Q is O- α -D-mannoside.
62. (Previously Presented) The method of claim 57, wherein Q is O- β -D-cellobioside.
63. (Previously Presented) The method of claim 57, wherein Q is O- β -D-glucopyranoside.
64. (Previously Presented) The method of claim 57, wherein Q is O- β -D-galactopyranoside.
65. (Previously Presented) The method of claim 57, wherein Q is O- β -D-galactopyranoside.
66. (Currently Amended) The method of ~~any of~~ claim 10 wherein the disorder is a malignant tumor.
67. (Currently Amended) The method of ~~any of~~ claim 10 wherein the disorder is a glioma.
68. (Currently Amended) The method of ~~any of~~ claim 10 wherein the disorder is a myeloma.
69. (Currently Amended) The method of ~~any of~~ claim 10 wherein the disorder is a papilloma.
70. (Currently Amended) The method of ~~any of~~ claim 10 wherein the disorder is a carcinoma.
71. (Currently Amended) The method of ~~any of~~ claim 10 wherein the disorder is a fibrosarcoma.
72. (New) The method of claim 4, wherein the proliferative disorder is a benign or malignant tumor.

73. (New) The method of claim 4, wherein the proliferative disorder is selected from the group consisting of colon cancer, intestinal polyps, intestinal tumors, inflammatory bowel diseases, ulcerative colitis and Crohn's disease, necrotizing enterocolitis, ileocectitis, other inflammations of the lower bowel, antibiotic associated colitis, and tumors of the urogenital tract.

74. (New) The method of claim 4, wherein the disorder is colon cancer.

75. (New) The method of claim 4, wherein the disorder is a benign tumor selected from the group consisting of papilloma, adenoma, firoma, chondroma, osteoma, lipoma, hemangioma, lymphangioma, leiomyoma, rhabdomyoma, meningioma, neuroma, ganglioneuroma, nevus, pheochromocytoma, neurilemona, fibroadenoma, teratoma, hydatidiform mole, granuosa-theca, Brenner tumor, arrhenoblastoma, hilar cell tumor, sex cord mesenchyme, interstitial cell tumor, and thyoma.

76. (New) The method of claim 72, wherein the tumor is selected from the group consisting of a malignant tumor (cancer), prostatic adenocarcinoma, bladder carcinoma, adenocarcinoma, fibrosarcoma, chondrosarcoma, osteosarcoma, liposarcoma, hemangiosarcoma, lymphangiosarcoma, leiomyosarcoma, rhabdomyosarcoma, myelocytic leukemia, erythroleukemia, multiple myeloma, glioma, meningeal sarcoma, thyoma, cystosarcoma phyllodes, nephroblastoma, teratoma choriocarcinoma, cutaneous T-cell lymphoma (CTCL), cutaneous tumors primary to the skin, breast and other tumors infiltrating the skin, Kaposi's sarcoma, and premalignant and malignant diseases of mucosal tissues.

77. (New) The method of claim 4, wherein the disorder is selected form the group consisting of preneoplastic lesions, mycosis fungoides, psoriasis, dermatomyositis, rheumatoid arthritis, viruses, molluscum contagiosum, premalignant and malignant diseases of the female genital tract.

78. (New) The method of claim 72 further comprising administering an effective treatment amount of a chemotherapeutic agent.

79. (New) The method of claim 72, wherein the chemotherapeutic agent is doxorubicin.

- 80. (New) The method of claim 72, wherein the disorder is a malignant tumor.
- 81. (New) The method of claim 72, wherein the disorder is a glioma.
- 82. (New) The method of claim 72, wherein the disorder is a myeloma.
- 83. (New) The method of claim 72, wherein the disorder is a papilloma.
- 84. (New) The method of claim 72, wherein the disorder is a carcinoma.
- 85. (New) The method of claim 72, wherein the disorder is a fibrosarcoma.